

## Supplementary Materials

Table A1: Explanation of Attributes

Attr	Explanation
Inc	Total of permanent households with monthly nominal income per capita equal or higher then US\$ 2,200 per month
Dens	Population density older than or equal to 18 years
PTra	Public transportation with 50 or more parking spaces
PShop	Shopping centers with parking lot for at least 50 vehicles
Dcia	Workplace: areas with at least 50 organizations
PPP	Roads, corridors and avenues connecting with inter-municipal, interstate highways and two or more neighborhoods
PGeo	Geohazard: restricted areas for construction
PWat	Flooding: areas subjected to risk of flooding
Slop	Slope greater than 25 degrees
Rest	Green areas: In land use planning, urban open space is open space areas for "parks", "green spaces", and other
Rest	Water bodies: is any significant accumulation of water on a planet's surface
Rest	Subnormal agglomerates: Cluttered and dense poor settlements, most lacking basic urban utilities and essential services

Table A2: Technical specifications of the charging equipment levels

Level	Typical Use	Energy interface	Power Level	Charge Time
EVCS_L1 AC 120 V EVCS 1 DC 200 - 450 V	Home or Office	Convenience outlet	Up to 2 kW $\leq 20\text{kW}$	12 to 18 hours
EVCS_L2 AC 240 V EVCS 2 DC 200 V– 450 V	Dedicated Outlets	Dedicated outlet	$\leq 20\text{ kW}$ $\leq 80\text{kW}$	3 to 8 hours From 20 min to 7 hours
EVCS_L3 AC Undefined EVCS 3 DC 200 V – 450 V	Commercial Station	Dedicated EVSE	50 – 100 kW ~120 Kw	Less than 30 minutes

Source: (EPA 2017)